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SPECIFICATIONS

FOR CHANGES AND ADDITIONS ON

CONSTRUCTION OF

FACILITIES REQUIRED FOR THE

STATINTL

[redacted]

AT

STATINTL

[redacted]

JOB NO. 78-05327A CH NO. 3 FLD NO 6 DCC. NO. 1 NO CHANGE
IN CLASS. /DECLASS/ /CLASS CHANGED TO: TS S C EST. COST.
NEXT REV DATE — REV DATE 9 59 REVIEW 20 30 TYPE NOC 06
NO. PGS 9 OPERATION DATE ORG COMD 35 OPI ORG CLASS 4
REV CLASS 4 REV COORD. AUTH: HR 70-3

UNITED STATES GOVERNMENT

JANUARY 25, 1954

STATEMENT OR WORK

1. This work consists of furnishing all labor and materials and performing all work in strict accordance with these specifications and Drawing No. 7 forming parts thereof, all complete with exterior and interior facilities and ready for service as shown on the drawings and as specified.

2. The General Conditions, wage documents, etc., of the General Contract, shall apply to these changes.

3. In general, the main units of change will consist of the following:

Change No. 1 -- Various additions and changes under General Contract, Item No. 9.

Change No. 2 -- New Ramp Curb (concrete).

Change No. 3 -- New Fume Hood, Exhaust Fan and related ductwork and electrical work.

CHANGE NO. 1

Changes Under Item No. 9

1. Furnish and install new wall partitions as noted and detailed on Drawing No. 7. Over one partition No. 11, install EXPANDED METAL GRILLE TO CEILING. Metal to be not less than 18 gage. Relocate door removed from existing opening "C" to new location noted door G. Install new doors noted E, F and H. Doors to match existing doors in place in rooms "A" and "B", except without louvers in lower panel. All doors to have hardware matching existing hardware of adjacent doors, except that the outer door "H" shall have in addition a deadlock night latch lock. Install 1 x 4 finished pine square edge casing on both sides of each door opening.

2. Paint all new work according to General Contract Specifications, Paragraph 9.8.

3. Separately Controlled Electric Clock Circuit.--

a. General.--Rooms "A", "B", "C", and "D" shall be provided with an independently energized electric clock circuit having four (4) outlets. One outlet has been installed previously, so that only three (3) additional ones are to be installed. See Contract Drawing No. 7.

b. Circuit Details.--All four (4) outlets shall be wired together as one 2-wire, 120-volt circuit, controlled by a 2-wire SP circuit-breaker, which shall be energized from the line side of the main circuit-breaker.

c. Clock Circuit-Breaker.--This shall be located at the load center and shall be mounted to the right of the main breaker and shall be 50-ampere frame, 20-ampere trip, 2P-SN, similar in all other respects to other breakers in load center.

d. Wiring.--No. 12 BX armored cable may be used, except riser coming up from breaker to ceiling, which shall be two (2) No. 12 conductors in 3/4-inch conduit.

4. Electric Changes and Additions.--

a. Amendment to Paragraph 9.55(g), Addendum No. 1. Change last sentence to read as follows:

> "Associated conduit shall be 1-inch with 4 No. 10 conductors, instead of 3/4-inch with 2 No. 10, as shown on drawing."

b. Add the following sentences:

"Two of these conductors shall be connected to two (2) poles of each receptacle, and the third pole of each receptacle shall be left unconnected. These same two conductors shall be connected to the generator output. The remaining two conductors shall be considered as spares and shall be brought out in two additional junction boxes, which shall be located directly under the two receptacles and shall be equipped with blank covers. These spare conductors shall be suitably taped and coiled, for future use, in the boxes and at the generator end also."

c. New Paragraph 9.55 (h) -- 208-Volt Outlets.--Contrary to the note on Contract Drawing No. 5, the feeder for these receptacles shall be four No. 10 conductors in 1-inch conduit, instead of two No. 10 conductors in 3/4-inch conduit as shown on drawing. Three of these conductors shall function as neutral and phase leads and shall be connected to the two (2) existing receptacles to provide 3-wire, 120/208-volt service. The fourth conductor shall be considered as a spare. All four conductors shall be brought out in two additional junction boxes, which shall be located directly under the two receptacles and shall be equipped with blank covers. In each box, the four conductors shall be taped and coiled, for future use.

CHANGE NO. 2

New Ramp Curb

The work by this change involves the addition of a 6"x6" reinforced concrete curb, poured on the new ramp integral with the ramp slab. See Drawing No. 7 for details. Concrete shall be the same as specified for the ramp floor slab. The reinforcing shall conform to the specifications, Paragraph 3.5 of the General Contract.

CHANGE NO. 3

Fume Hood, Exhaust Fan and Ductwork, and Electrical Work

1. Fume hood shall be installed over sink and table in Room No. 17 where indicated on Contract Drawing No. 7 and shall be constructed of lead-coated sheet metal of dimensions and arrangement as indicated on the drawing.

2. Lead-coated sheet metal shall be not less than No. 18 gage sheet steel coated both sides with high quality lead of not less than 14 pounds per 100 square foot.

3. Hood shall be constructed with apron with drip gutter and sloping top to center duct outlet. Provide baffle on underside of hood with slots around perimeter to increase air velocity around the outer edges of the hood to prevent escape of fumes. Baffles shall be constructed of metal similar to hood. Hood shall be substantially constructed and rigidly braced. Submit six (6) shop drawings for approval before beginning fabrication of the unit. Drawings shall indicate method of support as well as construction.

4. Exhaust Fan.--

a. Provide above ceiling of Room No. 17, where indicated on drawing, a utility type corrosion-resistant exhaust fan.

b. Fan shall have a capacity of not less than 2500 c.f.m. with an outlet velocity of not more than 2000 f.p.m. when producing a total of 1/4" w.g., combined suction and discharge pressure. Fan shall be selected in accordance with standards of NAFM Bulletin No. 110.

c. Fan shall be of the centrifugal type with steel housing and motor support, etc. Housing shall be constructed of not less than 14 gage sheet steel and motor support shall be rigidly braced.

d. Inside of housing scroll fan and shaft and air connections shall be heavily coated with corrosion resistant phenolic resin material or other approved material of equal or better quality.

e. Fan shall be driven by a two-speed motor of 1750 and 860 r.p.m. and not less than 3/4 H.P. Motor shall be heavy-duty industrial type, similar and equal to General Electric Company, Type K, designed for operation on 208-volts, 3-phase, 60-cycle current. Drive shall be through a heavy-duty V-belt of not less than 1.4 times the fan brake horsepower.

5. Ductwork.--

a. Ductwork shall be constructed of not less than No. 22 gage lead-coated sheet steel as similarly specified for canopy hood. All seams shall be air-tight and joints locked together and fixed with

sheet metal screws. Ductwork generally shall be constructed and erected as recommended in the Guide of the ASHVE. Ductwork shall be substantially and rigidly supported.

b. Provide fireproof flexible collars in ductwork to fan intake and discharge connections. Flexible material shall be heavy woven asbestos cloth. Collars shall be approximately 4" long and secured to ductwork with heavy metal bands not less than 1" wide.

6. Fan unit shall be mounted on an anti-vibration base of approved design with an absorbing efficiency of not less than 80%.

7. All equipment and base shall be submitted for approval of the Contracting Officer.

8. Electrical.--

a. Hood Lighting.--Two 100-watt lighting fixtures, complete with 100-watt lamps, shall be provided inside the hood and shall be mounted in the locations shown on Contract Drawing No. 7. Fixtures shall be vaportight, similar and equal to Russell & Stoll Catalog No. 5005 for 100-watt lamp, made entirely of cast brass, with screw-type globe, but less guard. Mounting hardware shall be brass or bronze. Aluminum alloys are not acceptable. An approved corrosion-resisting paint shall be applied to fixtures, hardware and conduit. All conduit shall be on the outside on top of the hood and shall be galvanized rigid steel and shall enter each fixture through the back of the fixture base by means of a pipe nipple and LB-type fitting. The two fixtures shall be joined by a single run of 3/4-inch conduit, in which a T-type fitting shall be installed. From the T-type fitting, a flexible conduit shall be run vertically to a 4-inch junction box on the room ceiling. Wiring coming to this point shall be as specified in Paragraph g.

b. Motor Starter.--Shall be suitably mounted adjacent to fan motor, in a vertical position independent of motor or fan base. Starter shall be magnetic type, of sufficient rating and for two-speed operation, with two interlocked contactors equipped with thermal-overload and low-voltage protection on each speed. Thermal overload devices shall match full-load current ratings shown on nameplate of motor being furnished. Control shall be by means of a push-button station as hereinafter specified.

c. Motor Disconnect Switch.--Shall be mounted adjacent to motor and on same support as starter and shall be Type D, enclosed, externally-operated, quick-break, 3-pole, 30-ampere, 250-volt, non-fused.

d. Receptacles.--Two duplex convenience outlets shall be installed on the back of the sink splashboard, one at each end. Receptacles shall be mounted in rectangular outlet boxes with suitable plates. Boxes shall be joined by a 3/4-inch galvanized rigid steel conduit which shall be bonded to the cold water pipe. Box at left-hand end shall be fitted with a 6-inch pigtail of 3-wire, No. 12, Type S, portable cable, terminating in a 3-wire, 20-ampere polarized, twist-lock plug, similar and equal to General Electric Company Catalog No. GE 3146, with metal cord grip. The portable cable to which the above plug connects shall be as specified in Paragraph g.

e. Feeder.--Power for fan motor, receptacles, and hood lighting shall be obtained by tapping the 4-wire, 3-phase feeder which is being provided under this contract for another machine in the same room (See Contract Drawing No. 5). A circuit-breaker shall be furnished and installed on the wall above the existing group of lighting switches adjacent to the room doorway. Breaker shall be enclosed surface-mounted, NEMA, Type 1A enclosure, pilot light and external handle, 50-ampere frame, 20-ampere interchangeable trip, solid neutral, for 4-wire, 3-phase, 120/208-volts, a.c., similar and equal to Westinghouse Type AB-1. Taps leading to line side of breaker shall not be over five (5) feet long and shall be No. 8 AWG in 1-inch conduit.

f. Hood Light Switch.--This shall be 15-ampere, 125-volt, single-pole, T-rated, mounted in rectangular outlet box with suitable plate, located on room wall on left-hand side of feeder breaker. There shall be a short conduit nipple between switch and breaker.

g. Power Wiring.--A 4-wire, 3-phase circuit, plus one switch leg (fire conductors) shall be run from the circuit-breaker up the wall and along the ceiling to a 4-1/2-inch square outlet box, located above the left-hand end of the sink. From this box, a branch of the 4-wire, 3-phase circuit (four conductors) shall be run up through the ceiling and thence to the line side of the fan motor disconnect switch. Next to this box, also, there shall be a second identical box, connected by a conduit nipple. This box shall be so positioned that a drop cord, attached to the cover, will hang straight down to connect with the twist-lock plug specified in Paragraph d. Cable shall be Type S flexible cable, 3-wire, No. 12, equipped with 3-wire, 20-ampere twist-lock cord connector, for use with the twist-lock plug mentioned above. Cable shall be connected to two phase conductors and neutral in the ceiling junction box. From this box, the switch leg and neutral shall be routed along the ceiling to the 4-inch junction box which serves the hood lights as specified in Paragraph a.

h. Push Button Station for Control of Fan Motor.--This shall be standard duty, industrial type, surface-mounted, similar to General Electric Company Type CR-2940. There shall be three (3) push buttons and two pilot lights, all in a vertical row, in the following order reading from the top:

Red Pilot Light	- Fast
Amber Pilot Light	- Slow
Push Button	- Fast
Push Button	- Slow
Push Button	- Stop

Station shall be mounted on room wall adjacent to, and to the left of, the feeder breaker specified in Paragraph e. From here, all control wiring shall be routed in a single conduit running directly up to the fan motor starter.

i. Circuit Details.--Receptacles specified in Paragraph d. shall be connected to separate phases. Hood lights shall be connected to the third phase.

j. Wiring.--All conduit shall be galvanized rigid steel. All conductors shall be RH-RW insulated, No. 12 AWG, except push button and pilot light circuits which may be No. 14 RH-RW insulated.

9. Painting.--Exterior of hood, ductwork, hangers and bracing, etc., in the occupied room shall be painted two coats over primer of best grade high quality lead and oil paint of off-white color. Existing finish in room marred during the installation of equipment, etc., shall be refinished to match present finish.

10. Offset and extend the existing heating duct above the ceiling over the new hood as indicated on Drawing No. 7. Relocate the existing diffuser in the ceiling location noted on the drawing.

11. New framing lumber called for on Drawing No. 7 shall be of the same grade and class as the existing adjacent material.